Please replace the paragraph beginning at page 10, line 18, with the following rewritten paragraph:

According to a 30th aspect of the present invention, there is provided a method of fabricating a semiconductor device as defined in any of the 25th through 29th aspects, wherein a flat surface portion is formed at the vertex portion of each of said first protrusion and said second protrusion before said conductive adhesive is provided, and then said conductive adhesive is provided on the flat surface portion.

Please replace the paragraph beginning at page 16, line 2, with the following rewritten paragraph:

Figs. 1A-1C show sectional views of processes of a bump electrode forming method according to a first embodiment of the present invention, where an Au wire 101 is prevented from coming in contact with any portion other than the ball bond portion 115 when the Au wire 101 is bonded to the ball bond portion 115.

Please replace the paragraph beginning at page 17, line 6 through page 18, line 4, with the following rewritten paragraph:

It is noted that the ball bonding method is also described in detail in a seventh embodiment described below. In Fig. 3B, first, the controller 181 controls the motors 154 and 155 so that the capillary 113 is moved to a torch 160 to form a ball at the lower end of the wire 101. Then, the capillary 113 is moved to a first wire coordinate (X,Y,Z) as a reference position for forming a bump electrode 116 (bump) on the electrode 104 of the board 170 by control of the controller 181 based on the data stored in a memory 182 of the controller 181. The first wire coordinate is located just above the position of the electrode 104 in the Z direction. At this time, a clamp 159 for clamping the wire 101 set above the capillary 113 in the capillary driving device 150 is open so as to not clamp the wire 101. Then, the driver 180 of the supersonic generating device 152 is controlled by the controller 181 so that the capillary 113 is moved down toward the electrode 104 at a first step (1) of Fig. 3B by the supersonic generating device 152. When the capillary 113 has been moved down by a predetermined distance stored in the memory 182, the descending speed

of the capillary 113 is lowered to prevent the capillary 113 from contacting the electrode 104 with such a large force that damages it. That is, the capillary 113 is slowly moved down at a second step (2) toward the electrode 104. When the capillary 113 contacts the electrode 104, the capillary 113 continues to descend until the driver 180 detects a predetermined load from the capillary 113 by detecting a current running through the driver 180, and after the load detection, the driver 180 sends a first contact signal to the controller 181. Based on the reception of the first contact signal, the controller 181 controls the driver 180 to apply supersonic vibration to the capillary 113 with a first load to form a ball bond portion 115 on the electrode 104 as shown in Fig. 1A at a third step (3). Then, after the formation of the ball bond portion 115, the capillary 113 is moved up at a higher speed than the descending speeds of the second and third steps (2) and (3), at a fourth step (4).

Please replace the paragraph beginning at page 18, line 5, with the following rewritten paragraph:

Then, at the start of a fifth step (5), the clamp 159 starts to clamps the wire 101 and continues to clamp it during a predetermined period of time. The capillary 113 is looped and moved down as shown in Fig. 5D at the fifth step (5) while the wire 101 is clamped by the clamp 159 for the period of time and after the period of time the wire 101 is free from clamping.

Please replace the paragraph beginning at page 18, line 13 through page 19, line 17, with the following rewritten paragraph:

Then, at a seventh step (7) of searching the slope of the ball bond portion 115, the capillary 113 is further moved down at a lower speed to prevent the capillary 113 from contacting the slope of the ball portion 115 with such a large force that damages it. At that time, as described above, the lowest position in height of the capillary 113 when the capillary 113 is moved down to bond the wire 101 to the slope of the ball bond portion 115 is preparatorily set to the position higher than the lowest position in the ball bonding stage. Accordingly, based on the preparatorily set position of the capillary 113, the movement amount of the capillary 113 in the Z direction is previously determined and stored in the memory 182. Thus, based on the stored position and

movement amount data, the controller 181 controls the supersonic generating device 152 to move the capillary 113 downward at the lower speed in order to bond the wire 101 to the slope of the ball bond portion 115, the movement amounts of the capillary 113 in the X and Y directions from the center of the ball portion 115 are also previously determined and stored in the memory 182 such that the bonding wire can be bonded to the ball bond portion with no space circumscribed by the bonding wire (see Figs. 1B and 1C). Thus, based on the stored position and movement amount data, the controller 181 controls the motors 154 and 155. When the capillary 113 contacts the slope of the ball portion 115, the capillary 113 continues to descend until the driver 180 detects a predetermined load from the capillary 113 by detecting a current running through the driver 180. After the detection, the driver 180 sends a second contact signal to the controller 181. Based on the reception of the second contact signal, the controller 181 controls the driver 180 to apply supersonic vibration to the capillary 113 with a second load to connect the wire 101 to the slope of the ball bond portion 115 as shown in Fig. 1B at an eighth step (8). After the connection of the wire 101 to the slope of the ball bond portion 115, the capillary 113 is moved up while the clamp 159 does not clamp the wire 101 at a ninth step (9). After the ninth step (9) is completed and the clamp 159 clamps the wire 101 again, the capillary 113 is moved upward to break the wire 101 and moved to a next coordinate (X,Y,Z) above the next electrode 104 at a tenth step (10). Then, at an eleventh step (11), another ball is formed at the lower end of the wire 101 by the torch 160. Then, the first to eleventh steps (1) through (11) are repeated on or above the next electrode 104.

Please replace the paragraph beginning at page 20, line 2, with the following rewritten paragraph:

As shown in Fig. 2, by making the chamfer diameter 109 of the bonding capillary 113 greater than the ball bond portion diameter, the ball bond portion 115 can be prevented from spreading outwardly in the ball bonding stage, thereby allowing the bonded state of the Au wire 101 to be stabilized. By thus stabilizing the bonded state of the Au wire 101, the Au wire 101 can be prevented from coming in contact with the electrode portion 104 when the Au wire 101 is cut by the bonding capillary 113.

Please replace the paragraph beginning at page 20, line 10, with the following rewritten paragraph:

As shown in Fig. 2, by setting the thickness of the tip end portion of the outer radius portion 108 of the bonding capillary 113 to, for example, 10 μm or smaller and making it have a tapered shape, the cutting force can be concentrated on the tip end of the outer radius portion 108 in cutting the Au wire 101. Since the Au wire 101 is cut by a small cutting force as described above, the Au wire 101 can be prevented from coming in contact with the electrode portion 104 in the cutting stage.

(Fifth Embodiment)

Please replace the paragraph beginning at page 20, line 18, with the following rewritten paragraph:

As shown in Fig. 1B, by setting the angle of the outer radius portion so that the outer radius portion of the bonding capillary 113 comes in uniform contact with the slope of the ball bond portion 115, the effect of bringing the bonding capillary 113 in contact with the Au wire 101 is improved, so that the Au wire 101 can be stably cut.

(Sixth Embodiment)

Please replace the paragraph beginning at page 23, line 7, with the following rewritten paragraph:

The terminal end 52 of the second protrusion 50 comes in contact with no adjacent electrode 2 of the semiconductor element 1.

Please replace the paragraph beginning at page 30, line 20, with the following rewritten paragraph:

Further, a semiconductor device can also be fabricated by forming the bump 310 on the electrode 2 of the semiconductor element 1 as described above in Step 1 shown in Fig. 11 and connecting the bump 310 onto the electrode 20 of the circuit board 19 in a face-down mounting manner in Step 2. When fabricating the semiconductor device as described above, the terminal

end 52 is neither brought in contact or short-circuited with the adjacent electrode 2 in the semiconductor element 1 having the bump 310.

Please replace the paragraph beginning at page 31, line 4, with the following rewritten paragraph:

Furthermore, in a semiconductor device 610 in which the semiconductor element 1 having the bump 310 is connected to the circuit board 19 (see Fig. 12), a test process for testing the performance of the electrical connection of the bump 310 to the electrode 20 on the circuit board 19 can be provided as one fabricating process of the semiconductor device 610 as shown in Step 3 in Fig. 11. This test will be described below.

Please replace the paragraph beginning at page 31, line 10, with the following rewritten paragraph:

For example, when the semiconductor element 1 having the bump 300 is mounted on the circuit board 19 in the face-down mounting manner, the terminal end 52 of the second protrusion 50 is not protruding from the outer end surface 1b of the periphery of the semiconductor element 1. Therefore, the portion in which the bump 300 is connected to the electrode 20 on the circuit board 19 cannot be visually checked. When the semiconductor element 1 having the bump 310 is mounted on the circuit board 19 in the face-down mounting manner, the outwardly protruding portion 53 is protruding from the outer end surface 1b of the periphery of the semiconductor element 1. Therefore, the portion in which the bump 310 is connected to the electrode 20 on the circuit board 19 can be viewed via the outwardly protruding portion 53 and subjected to a visual test.